

## **Bette Tina Marie Korber**

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### **Education**

California Institute of Technology, Pasadena, CA  
Ph.D. in Immunology through the Chemistry Department, 1988

California State University, Long Beach, CA  
B.S. in Chemistry, summa cum laude, 1981

### **Current Positions**

Laboratory Fellow, 2002 to present; Staff Scientist, 1993 to 2002  
Theoretical Biology and Biophysics Group (T-6), Theoretical Division  
Los Alamos National Laboratory ([www.lanl.gov](http://www.lanl.gov))  
Los Alamos, NM 87545

External Professor, 2004 to present, current appointment through July 1, 2013.  
Santa Fe Institute ([www.santafe.edu/](http://www.santafe.edu/)) Santa Fe, NM 87501

### **Training**

Postdoctoral Fellow, 1992 to 1993; Visiting Faculty, 1993 to 2004  
Santa Fe Institute, Santa Fe, NM  
Studies of HIV-1 and mother-infant viral transmission; funded through the  
Elizabeth Glaser Pediatric AIDS Foundation.

Postdoctoral Fellow, laboratory of Dr. Gerald Myers, 1990 to 1993  
Theoretical Biology and Biophysics, Theoretical Division  
Los Alamos National Laboratory, Los Alamos, NM  
Application of computational methods to the study of human retrovirus  
evolution and diversity.

Postdoctoral Fellow, laboratory of Dr. Myron Essex, 1988 to 1990  
Harvard School of Public Health, Department of Cancer Biology, Boston, MA  
Molecular epidemiology of human retroviruses.

Graduate Student, laboratory of Dr. Leroy Hood, 1983 to 1988  
California Institute of Technology, Pasadena, CA

Molecular immunology, studies of the regulation of murine class I gene expression by interferons.

Graduate Student, laboratory of Dr. Carl Parker, 1981 to 1983  
California Institute of Technology, Pasadena, CA  
Transcriptional regulatory elements in *Drosophila*.

**Awards, Honors, and Fellowships**

20 Women Who Made a Difference in New Mexico, scientific achievement category, November, 2009.

American Society for Microbiology, recognition for distinguished service, March 2008.

Adrian P. Lovell Spirit Award (New Mexico School), World Tae Kwon Do Association, Grandmaster Duk Sung Son's Blackbelt Summer Camp, August, 2007, New York

Los Alamos Star, Women's Diversity Working Group, 2007 "This award is given to women who go above and beyond the call of duty in the performance of their job functions, who have achieved scientific or technical success, who make important contributions to the community."

Spot Award for Chairing the T-10 Group Leader Search Committee, 2005

Finalist for Wired Magazine's Rave Award for "People Who Change People's Minds," 2005

E. O. Lawrence Award, Department of Energy National Scientific Achievement Award in the Field of Biology, 2004 ([www.er.doe.gov/lawrence](http://www.er.doe.gov/lawrence))

"The Lawrence Award honors scientists and engineers, at mid-career, showing promise for the future, for exceptional contributions in research and development supporting the Department of Energy and its mission to advance the national, economic and energy security of the United States."

Los Alamos National Laboratory Achievement Award, as leader of the HIV database Team recommending strategies for the development of an AIDS vaccine, 2002

Los Alamos National Laboratory Fellow, 2002

"The Laboratory Fellows organization was established in 1981 and is made up of technical staff members who have been appointed by the Director to the rank of Fellow in recognition of sustained outstanding contributions and exceptional promise for continued professional achievement. The Fellows are limited to two percent of the technical staff."

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California State University Long Beach Outstanding Alumnus Award for the School of Natural Sciences, 2001

Los Alamos National Laboratory Distinguished Performance Award, for group effort in studies of HIV-1 evolution, 2000

Department of Energy Federal Women's Program Community Leadership Award, 1997

Elizabeth Glaser Scientist Award, Pediatric AIDS Foundation, for continuing work on pediatric AIDS, 1997 through 2003.

“The Elizabeth Glaser Scientist Award (EGSA), the Foundation's highest scientific honor, is an investment in the most promising HIV/AIDS researchers at a critical stage in their careers.”

Los Alamos National Laboratory Achievement Award for studies of HIV evolution and disease progression, 1996 and 2002

Los Alamos National Laboratory Distinguished Performance Award, for group effort in producing the Human Retroviruses and AIDS Database, 1990

Director's Funded Postdoctoral Fellow, Los Alamos National Laboratory, 1990 to 1992

Leukemia Society Fellow, Harvard University, 1990

Earl C. Anthony Fellow, California Institute of Technology, 1981 to 1982

Phi Beta Kappa and Phi Kappa Phi, 1981

American Institute of Chemists Award, 1981

Phi Kappa Phi Scholarship, 1981  
Rhodes Award, 1981

Outstanding Graduate of the School of Natural Sciences, California State University of Long Beach, 1981

### **Professional Activities**

Evolutionary Bioinformatics Editorial Board, 2011 to present

Organizer of a workshop on global Tuberculosis Surveillance, Santa Fe, NM. December 2010.

CHAVI Scientific Leadership Group, November 2010 to present

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HIV Vaccine Global Enterprise Host Genetics and HIV diversity Working Group, May 2009 to present.

Ragon Institute Scientific Advisory Board. The Global HIV Vaccine Enterprise Scientific Committee. Dec. 2008 to Oct 2012.

One of the Editors-in-chief of the journal *Epidemics*, Jan 2009 through Dec 2010.

HIVRAD scientific advisory board, PI Ruth Ruprecht, Harvard. 2007 to present, chair 2010.

CHAVI scientific advisory board, Oct 2005 to present.

Honorary Editorial Board of *Immunology and Immunogenetic Insights*, Feb 2008 to present.

Scientific Program Organizer for Keystone HIV Pathogenesis, Banff, Canada, March 2008.

Organizer of a Phylogenetic Theory Workshop, April 2008, Santa Fe Institute, Santa Fe, NM, 2008.

Scientific Program Committee for *Vaccines* 2010, 2006, 2004 and 2001.

Editorial Board, *Journal of Virology* from 1996; current appointment term December 2004 to 2007

Santa Fe Institute Scientific Steering Committee, January 2004 through June 2007

Conference organizer for HIV Dynamics and Evolution meeting held in Santa Fe, NM, April 1998; continuing on the organizing committee for 1999 (Atlanta), 2000 (Seattle), 2001 (Paris), 2002 (UCSD), 2003 (UCSD), 2004 (Stockholm), 2007 (Segovia, Spain), 2008 (Santa Fe, NM).

Editorial Board of *AIDS*, August 2002 through July 2005

Represented the Laboratory Fellows at the New Mexico Board of Education to discuss science teaching standards regarding evolution, 2003

Member of the AIDS Vaccine Research Working Group (AVRWG, formerly called the "Baltimore committee"), 2002 through Jan 2006.

ASM Microbial Forensics Colloquium Steering Committee, 2002

*April 2012*

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Evolutionary Synthesis Center Workshop Participant to develop a plan for an NSF sponsored national evolutionary study center, 2002

Adjunct Faculty, Department of Molecular Genetics, University of New Mexico School of Medicine, November 2001 through December 2003

Member of Los Alamos committee to review the role of complex systems in the Theoretical Division, representing Biology, 2001

Great Lakes Regional CFAR Review Board, 2000 to 2002

Los Alamos committee member awarding the Dick Slansky Memorial Postdoctoral Fellowship, 2000

Conference organizer for the HIV Nomenclature meeting held in Santa Fe, NM, September 1999

NIH-NIAID Vaccine Resources Development Group Member, 1998 to present

Los Alamos LDRD grant review committee member for biological sciences, 1998 to 2000

Organizer for the Lake Tahoe Center Meeting on Antiviral Therapy, January 1998

The International Committee on Taxonomy of Viruses (ICTV) Vertebrate Virus Retrovirus Study Group Subcommittee member, 1997

Internal Review Board (IRB) Member for St. Vincent's Hospital, Santa Fe, NM, 1996 to 2004. Currently serving as an occasional reviewer for AIDS protocols.

Steering, Writing and Statistics committee member for the NIH International Perinatal HIV Group project, 1996 to 2001

Basic Science Program Committee Member for the XI International Conference on AIDS, Vancouver, Canada, July 1996

UNAIDS/WHO Network Member for HIV vaccine strategies, 1992 to present

Occasional grant reviewers for the NIH AIDS and Related Research Study Section and the Gates Foundation.

### **Consulting Experience**

Harvard Statistics group for analysis of HIV drug resistance mutations

CDC Bioinformatics Group

Expert witness on HIV genetic analysis, for a murder trial held in Lafayette, LA

**PATENTS:**

**US 8,071,107 B2 ISSUED 12/6/2011**

**NUCLEIC ACIDS ENCODING MODIFIED HUMAN  
IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1) GROUP M  
CONSENSUS ENVELOPE GLYCOPROTEINS.**

**Teaching Experience**

Frequent guest lectures discussing AIDS and the immune system for various local groups, college courses, Los Alamos summer student courses, and medical continuing education courses

Instructor for 3-4 hour training workshops for using the HIV database, given several times a year at major HIV-1 meetings

Statistical and Applied Mathematical Sciences Institute (SAMSI), Research Triangle, NC. SAMSI Guest lecturer on statistical issues in phylogenetics. December 2004

Lectures on the immune system and HIV, 2002 Biology for Mathematicians, Santa Fe, NM

Lectures on the immune system and HIV, 2002 Complex Systems Summer School, Santa Fe, NM

Phylogenetic Reconstruction, Theory and Applications Mini-Course, 1996  
Complex Systems Summer School, Santa Fe, NM

Lecturer, Cell and Molecular Biology; Eukaryotic Gene Expression, 1987  
Loma Linda Medical School, Loma Linda, CA

Teaching Assistant, Cellular and Molecular Immunology, 1985  
California Institute of Technology, Pasadena, CA

Teaching Assistant, Molecular Biology and Biochemistry, 1981 to 1982  
California Institute of Technology, Pasadena, CA

**Life Outside the Lab**

I'm a mother, a reader, a river-runner, a hiker, and a volunteer for political and educational causes. I'm a black belt and although I'm not currently practicing, I've practiced Shotokan Karate and Tae Kwon Do for a total of 18 years. I play drum and whistle for a local Celtic band (<http://internet.cybermesa.com/~keating/>). With my family and friends, I have founded two ARKs through the organization NOAH, for AIDS orphans in the KwaDunusa community in South Africa in Zulu communities hard hit by

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HIV. I'm on the Board of Directors for Friends of NOAH in the United States, a fledgling sister organization to NOAH, to enable people in the US to help support the fine work NOAH does in South Africa.